

### **AMENDMENTS TO THE DRAWINGS:**

The attached sheets of drawings include a change to Figures 3 and 5. This replaces the original sheets including Figures 3 and 5. In Figure 3, previously omitted element 300 has been added. In Figure 5, the direction arrow of the no output of step 630 has been corrected.

Attachment: Replacement Sheets.

## **REMARKS**

Claims 1, 3-21, and 23-39 are pending in the present application. Claims 2 and 22 were canceled. Claims 1, 3-5, 7, 8, 10-14, 16-18, 20, 21, 23-25, 27, 28, 30-32, 34-36, 38, and 39 were amended. Reconsideration of the claims is respectfully requested.

Amendments were made to the specification to correct errors and to clarify the specification. No new matter has been added by any of the amendments to the specification. In addition, amendments to Figures 3 and 5 have been included.

### **I. 35 U.S.C. § 102, Anticipation, Claims 1-20, 21 and 39**

The Examiner has rejected claims 1-20, 21 and 39 under 35 U.S.C. § 102(b) as being anticipated by *Nemoto* (U.S. Patent No. 6,584,180) (hereinafter *Nemoto*). This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. (*In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). All limitations of the claimed invention must be considered when determining patentability. (*In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994)). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. (*Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983)).

A. Amended independent claim 1 of the present invention, which is representative of amended independent claims 21, and 39, reads as follows:

1. A method of handing over a communication from a first device to a second device, comprising:
  - enabling a speech recognition function;
  - using the speech recognition function to transcribe a portion of the communication to thereby generate a transcription, wherein the portion of the communication that is transcribed includes only speech input from a first call taker to the first device; and
  - sending the transcription to the second device when handing over the communication from the first device to the second device.

With regard to claim 1, the Examiner stated:

As to claims 1, 21, and 39, Nemoto teaches inherently sending the transcription to the second party device ("**screener**" is **2<sup>nd</sup> party device**) when handing over the communication from the first party device to the second party device (**words from recognition result (col. 9, lines 39-40).**

(*Office Action*, dated January 31, 2005, Pages 2 and 3).

*Nemoto* is an example of an automatic voice interaction system that includes a call center system which deals with customers who call the system to perform telephone shopping. **Instead of a human operator, the shopping customer interacts with a computer** through a voice recognition means and a voice response means to place an order for goods and/or services using voice communication. (emphasis added) (*Nemoto*, Col. 1, lines 16-23). *Nemoto* teaches an automatic voice system for receiving a **voice input from a caller** and for transmitting a voice message to the caller.... (emphasis added) (*Id.*, Col. 2, lines 65 – 67). In other words, *Nemoto* teaches that the voice input of the caller is used to interact with the automated computer system, without initial human operator assistance, to determine the caller's needs.

In contrast, amended claim 1 of the present invention recites a method for using a speech recognition function to transcribe only speech input from a first call taker to a first device to generate a transcription. In other words, in the Applicants' current invention recited in claim 1, the caller interacts with the first call taker, which is a human operator, at the start of the process. For example, the caller initiates a call to the call center and the call director routes the call to one of the level-1 call taker workstations. The caller then begins conversing with the operator of the level-1 workstation and describes the problem. (*Application*, Page 14, lines 6-11). However, *Nemoto* teaches that the call is received by a computer system, not a human first call taker as recited in claim 1 of the present invention.

In addition, *Nemoto* teaches that the voice input of the caller is utilized by the automated system. In *Nemoto*, the automatic voice response means **transfers the received voice of the caller to the voice recognition means**, and the voice recognition means generates the voice recognition result and transmits the voice recognition result to

the automatic voice response means. (emphasis added) (*Nemoto*, Col. 3, lines 18-23). Conversely, claim 1 of Applicants' current invention recites that the speech recognition function **transcribes only speech input from a first call taker**. Thus, the call taker's voice input is used by the speech recognition function in the present invention, whereas in *Nemoto* the caller's voice input is used by the voice recognition means.

Furthermore, the generated transcription sent to the second device when communication is handed over from the first device to the second device as recited in amended claim 1 of the present invention is distinguishable from the voice recognition result sent to the screener in *Nemoto*. In *Nemoto*, voice recognition includes a word list of words to be recognized. This word list includes proposed words corresponding to expected voice input such as catalog order items. (*Nemoto*, Col. 4, lines 15-18). If the voice recognition means should fail to recognize an intelligible request in the voice of the caller, the call is transferred to a screener. (*Id.*, Col. 3, lines 46-53). *Nemoto* teaches that:

[T]he automatic voice response transfers to the screener interface a WAVE file of the caller's most recent voice clip received as well as the words included in the most recent recognition result which have been denied by the caller. The screener interface reproduces the WAVE file through its speaker or the headphone, and refers to the table stored in the storing section for storing a word list to be recognized. Then, the screener interface displays on the display, those **proposed words** other than the words denied by the caller. The screener then selects a word from the proposed words displayed which the screener recognizes as an intelligible word uttered by the caller and enters a number corresponding to this selected word using the keyboard. The screener interface transmits text data of the word corresponding to the number as the recognition result to the automatic voice response. (emphasis added).

(*Id.*, Col. 9, lines 36-53).

In other words, in *Nemoto*, because the voice recognition means determines that the caller's voice input is unintelligible, the voice recognition means sends a list of expected caller responses to the screener without the previously denied words by the caller included. The list of proposed words sent to the screener is the result of failed voice recognition (recognition result) by the voice recognition means in *Nemoto*. If the voice recognition means, in *Nemoto*, cannot understand the caller's voice input, it stands to reason that the voice recognition means cannot send a transcription of what the caller

stated. The voice recognition means in *Nemoto* merely sends a list of proposed responses for the screener to select from. A recognition result, which consists of an entire list of expected caller responses as taught in *Nemoto*, is distinguishable from a transcription of a caller's voice input.

Claim 1 of the present invention recites a generated transcription of the voice input from a first call taker. By way of example:

With the preferred embodiment of the present invention, the speech recognition system is trained to recognize the speech of the level-1 call taker workstation operator rather than the caller. Because the speech recognition system is trained for one individual operator rather than attempting to recognize speech from various callers, a more accurate representation of the actual speech may be obtained. If a general speech recognition system were used to try and recognize the speech of hundreds of callers, the likelihood that errors are introduced is quite high.

(*Application*, Page 11, line 31 – Page 12, line 8).

The operator of the level-1 call taker workstation may then converse with the caller, preferably repeating or summarizing the problem information provided by the caller verbally. In repeating or summarizing the problem information, the operator speaks into the microphone. The operator's speech input is received by the microphone which transmits the speech as signals to the speech recognition system. The speech recognition system interprets the received signals as textual words and outputs the textual words to the call center computer system. The call center computer system may then store the textual words in a record associated with the call as well as provide the textual words as output to the level-1 call taker workstation for verification by the operator. The operator may be provided a mechanism through an interface associated with the level-1 call taker workstation to indicate whether or not to keep or discard the textual words.

(*Id.*, Page 13, lines 10-27).

The generated transcription of the voice input from a first (level-1) call taker as recited in claim 1 of the present invention is not analogous to a list of proposed caller responses sent to a screener's display for the screener's selection after the voice recognition means determined that the caller's voice input was unintelligible as taught in *Nemoto*.

Moreover, because a transcription of the caller's voice input is not generated by the voice recognition means in *Nemoto*, *Nemoto* cannot send a transcription from a first device to a second device as is recited in claim 1 of Applicants' current invention. Even if, for the sake of argument, *Nemoto* was able to generate a transcription of the caller's voice input, which Applicants are not stipulating here, the transcription will be of the caller's voice and not of the call taker's voice as recited in claim 1 of the present invention.

As a result, *Nemoto* does not identically teach each and every element of Applicants' current invention as recited in amended independent claim 1, which is representative of amended independent claims 21 and 39. Accordingly, Applicants respectfully request that the rejection of independent claims 1, 21, and 39 under 35 U.S.C. § 102(b) as being anticipated by *Nemoto* be withdrawn.

**B.** In view of the arguments contained in Section A above, Applicants have already demonstrated amended independent claims 1, 21, and 39 to be in condition for allowance. Claims 3-20 and 23-38 are dependent claims depending on independent claims 1, 21, and 39, respectively. Consequently, Applicants respectfully submit that claims 3-20 and 23-38 are also allowable, at least by virtue of their dependence on allowable claims. Furthermore, these dependent claims also contain features not taught by the *Nemoto* reference.

**C.** For example, amended dependent method claim 3 of the present invention, which is representative of amended dependent apparatus claim 23, reads as follows:

3. The method of claim 1, wherein the portion of the communication that is transcribed includes speech input from a caller that initiated the communication.

With regard to claim 3, the Examiner stated:

As to claims 3 and 23, *Nemoto* teaches that the portion of the communication that is transcribed includes speech input from a third party that initiated the communication (**voice input from "caller", third party sent to screener or screener/operator, col. 2, line 66 and col. 10, lines 5-7**).

(*Office Action*, Page 3).

As argued above in Section A, *Nemoto* does not teach that the voice recognition means generates a transcription of the caller's voice input. *Nemoto* only teaches a recognition result that consists of a list of proposed words for the screener's review. Thus, *Nemoto* does not teach that the portion of the communication that is transcribed includes speech input from a caller as recited in claim 3 of Applicants' current invention.

D. Dependent method claim 7 of the present invention, which is representative of dependent apparatus claim 27, reads as follows:

7. The method of claim 1, wherein the speech recognition function is trained based on speech input from a first call taker associated with the first device.

With regard to claim 7, the Examiner stated:

As to claims 7 and 27, *Nemoto* does not teach using a speech recognition function trained on first party speech input.

(*Id.*, Page 5).

Applicants agree with the Examiner that *Nemoto* does not teach that the speech recognition function is trained based on speech input from a first call taker as recited in claim 7 of the present invention.

E. Amended dependent method claim 11 of the present invention, which is representative of amended dependent apparatus claim 31, reads as follows:

11. The method of claim 1, wherein the step of enabling the speech recognition function is performed in response to a manual input from a first call taker associated with the first device.

With regard to claim 11, the Examiner stated:

As to claims 11 and 31, *Nemoto* teaches a response to an input from a first party associated with a first party device (**recognition system analysis voice input – caller/user, first party device, col. 3, lines 3-4**).

(*Id.*, Page 4).

*Nemoto* teaches an automatic voice system for receiving a voice input from a caller and for transmitting a voice message to the caller includes: **automatic means for receiving a call** and storing a callers voice input;.... (emphasis added) (*Nemoto*, Col. 2, line 65 – Col. 3, line 2). In other words, *Nemoto* teaches that the voice input of the caller is automatically received by the computer system, without initial human operator assistance. However, claim 11 of the present invention recites that enabling the speech recognition function is performed in response to a **manual input** from a first call taker. In other words, the first call taker may enable the speech recognition function manually, as recited in claim 11 of the current invention, after determining the purpose of the call. *Nemoto* does not teach that the enablement of the voice recognition means may be manual, only that enablement is automatic. Therefore, *Nemoto* does not teach the recited limitation of claim 11 of Applicants' present invention.

F. Dependent method claim 13, reads as follows:

13. The method of claim 1, further comprising:  
displaying the transcription on the second device after the transcription is received by the second device when handing over the communication from the first device to the second device.

With regard to claim 13, the Examiner stated:

As to claim 13, *Nemoto* teaches displaying the transcription on the second party device after the transcription is received by the second party device when handing over the communication from the first party device to the second party device (**operator display when operator is combined operator/screener col. 10, lines, 17-21**).

(*Office Action*, Page 5).

*Nemoto* teaches that the screen of the operator interface displays a message to alert the operator whenever the operator becomes responsible for a conversation, whether as a screener or by PBX switched transfer of the call to the operator for manual mode handling. (*Nemoto*, Col. 10, lines 17-21). The immediately preceding passage from the *Nemoto* reference only teaches that the operator interface displays an alert message. This passage from *Nemoto* is not teaching that a transcription is displayed on the operator interface as suggested by the Examiner. In addition, as previously argued above, *Nemoto*



does not teach that the voice recognition means generates a transcription of the caller's voice input, but merely a list of proposed words as the recognition result for the screener. Thus, *Nemoto* does not teach displaying the transcription on the second device as recited in claim 13 of the present invention.

G. With regard to dependent method claims 14, 15, 16, 17, 18, 19, and 20 of the present invention, which are representative of apparatus claims 32, 33, 34, 35, 36, 37, and 38, respectively, the Examiner stated that *Nemoto* does not teach these recited features. (*Id.*, Pages 6-8). Applicants agree with the Examiner that *Nemoto* does not teach these recited claim limitations in the current invention.

As a result of the foregoing arguments, Applicants respectfully submit that *Nemoto* does not identically teach each and every element as recited in the present invention. Accordingly, Applicants respectfully request that the rejection of claims under 35 U.S.C. § 102(b) as being anticipated by *Nemoto* be withdrawn.

## II. 35 U.S.C. § 103, Obviousness, Claims 7, 14, 15, 27, 32, and 33

The Examiner has rejected claims 7, 14, 15, 27, 32, and 33 under 35 U.S.C. § 103(a) as being unpatentable over *Nemoto*. This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. (*In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992)). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. (*In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

A. Amended dependent method claim 7 of the present invention, which is representative of amended dependent apparatus claim 27, reads as follows:

7. The method of claim 1, wherein the speech recognition function is trained based on speech input from a first call taker associated with the first device.

With regard to claim 7, the Examiner stated:

As to claims 7 and 27, *Nemoto* does not teach using a speech recognition function trained on first party speech input.

Official Notice is taken that speaker-dependent speech recognition is old and notoriously well known. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to use the speech recognition function that is trained based on speech input from a first party associated with the first party device to increase recognition accuracy.

(Office Action, Pages 5 and 6).

Applicants agree with the Examiner that *Nemoto* does not teach using a speech recognition function trained on first call taker speech input. The Examiner takes Official Notice that speaker dependent speech recognition is well known in the art and that “it would have been obvious to one of ordinary skill in the art at the time of invention to use the speech recognition function that is trained based on speech input from a first party associated with the first party device to increase recognition accuracy.” (*Id.*). However, it is beside the point whether or not speaker-dependent speech recognition was well known in the art at the time of Applicants’ present invention. The relevant question is whether or not *Nemoto* suggests applying this well known concept. The Examiner has not provided any support from *Nemoto* to suggest adding the limitation found in claims 7 and 27, nor does such a suggestion exist in *Nemoto*.

Furthermore, in *Nemoto* the voice recognition means will be required to analyze the voice inputs of a large number of different customer callers on a daily basis. As a result, the voice recognition means in *Nemoto* cannot be trained based on a caller associated with a caller device. Only a generic or general speech model could be utilized in *Nemoto*, which will allow for a high probability of error to occur in analyzing a multitude of varying voice inputs. In contrast, claim 7 of the current invention recites that the speech recognition function is trained based on speech input from a first call taker associated with the first device. In other words, the speech recognition function recited in claim 7 is specifically trained to the voice input of the individual associated with the call taker workstation, thus allowing for a high probability of speech recognition.

**B.** Dependent method claims 14 and 15 of the present invention, which are representative of dependent apparatus claims 32 and 33, read as follows:

14. The method of claim 1, further comprising:  
analyzing the transcription to identify words of importance; and

displaying the transcription on the first device with the words of importance conspicuously identified in the display.

15. The method of claim 14, wherein the words of importance are conspicuously identified in the display by one of highlighting, using a different color text, using a different size font, and using a different font.

With regard to claims 14 and 15, the Examiner stated:

As to claims 14-15 and 32-33, Nemoto does not teach conspicuously identifying words of importance by highlighting them.

Official Notice is taken that highlighting important words is old and notoriously well known. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to identify recognized words of importance by highlighting to make them conspicuous for easy updating.

(*Id.*, Page 6).

Applicants agree with the Examiner that Nemoto makes no reference to conspicuously identifying words of importance by highlighting them. The Examiner takes Official Notice that highlighting important words was well known in the prior art at the time of Applicants' present invention and that "it would have been obvious to one of ordinary skill in the art at the time of invention to identify recognized words of importance by highlighting to make them conspicuous for easy updating." Applicants respectfully traverse the Official Notice and request that the Examiner provide either a prior art reference or an affidavit in support of the Official Notice.

The Examiner must rely on a reference for describing the level of ordinary skill. (*In re Pardo*, 684 F.2d 912 (C.C.P.A. 1982)). If the Applicant traverses such an assertion, the Examiner should cite a reference in support of his position. (*In re Malcolm*, 129 F.2d 529 (C.C.P.A. 1942)); MPEP § 2144.03. Moreover, if the Examiner is basing the rejection on facts within the Examiner's own personal knowledge, Applicants respectfully request that the Examiner comply with 37 CFR § 1.104(d)(2) and provide support for the Examiner's argument in the form of an affidavit "subject to contradiction or explanation by the affidavits of the applicant or other persons." (37 CFR § 1.104(d)(2)). Otherwise, the Examiner has not met the *prima facie* burden of proving obviousness.

Additionally, claim 14 of the current invention recites displaying the transcription on the first device with the important words conspicuously identified. As argued above in Section I-A, *Nemoto* does not teach that the voice recognition means generates a transcription of the caller's voice input, but merely teaches a recognition result that consists of a list of proposed words for the screener's review. Consequently, if *Nemoto* cannot produce a transcription, then *Nemoto* cannot display a transcription of the caller's voice input on the first device with the important words conspicuously identified as recited in claim 14 of the present invention.

Moreover, one of ordinary skill in the art would not have been motivated to combine the teachings of *Nemoto* with the teachings that the Examiner has stated as being well known in the prior art at the time of Applicants invention. The mere fact that a prior art reference can be readily modified does not make the modification obvious unless the prior art suggested the desirability of the modification. (*In re Laskowske*, 871 F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989) and also see *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992) and *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1993)). The Examiner may not merely state that the modification would have been obvious to one of ordinary skill in the art without pointing out in the prior art a suggestion of the desirability of the proposed modification. The Examiner has pointed out no teaching, suggestion, or incentive for making the combinations recited by the Examiner. The Examiner has only pointed out the pieces in the prior art and combined them herself. The Examiner has provided no motivation for the combination other than those advanced by her.

Accordingly, Applicants respectfully request that the rejection of claims 7, 14, 15, 27, 32, and 33 under 35 U.S.C. § 103(a) as being unpatentable over *Nemoto* be withdrawn.

### **III. 35 U.S.C. § 103, Obviousness, Claims 16-20 and 34-38**

The Examiner has rejected claims 16-20 and 34-38 under 35 U.S.C. § 103(a) as being unpatentable over *Nemoto* as applied to claims 1 and 21 above, in view of *Beck* (U.S. Patent No. 6,370,508) (hereinafter *Beck*). This rejection is respectfully traversed.

The Examiner rejected dependent claims 16-20 and 34-38 as being unpatentable over *Nemoto* as applied to independent claims 1 and 21. Amended independent claim 1 of the present invention, which is representative of amended independent claim 21, recites using the speech recognition function to transcribe a portion of the communication to thereby generate a transcription, wherein the portion of the communication that is transcribed includes only speech input from a first call taker to the first device. As argued in Section I-A above, *Nemoto* does not teach that the voice recognition means generates a transcription of the caller's voice input. *Nemoto* only teaches a recognition result that consists of a list of proposed words for the screener's review.

In addition, claim 1 of Applicants' current invention recites that the speech recognition function transcribes only speech input from a first call taker. However, *Nemoto* teaches that the voice input of the caller is utilized by the voice recognition means. In other words, in *Nemoto* the **caller's** voice input is used and in the present invention the **call taker's** voice input is used. Therefore, *Nemoto* does not teach or suggest all claim limitations of the Applicants' current invention.

*Beck* provides a facility for adapting an operation system for a multimedia call center to specific business practices and rules for a host enterprise within a broad set of possibilities, wherein business procedures, such as logical and calculation intensive procedures, may be accomplished more or less automatically with little if any human intervention. (*Beck*, Col. 5, lines 23-30). *Beck* teaches:

Once a call or other communication event registers at either a switch or a routing server, a customer-interaction network operating system (CINOS) immediately identifies the media type associated with the call and begins its processes depending on enterprise rules. For example, a connection oriented switched telephony call may first be routed to an interactive voice response (IVR) whereby the customer can be presented with varying choices such as leaving a voice message, waiting in queue, receiving a call back, or perhaps an e-mail, and so on. Interaction by an IVR in this instance, will preferably be via voice recognition technique such as is known in the art, but may also be via touch tone response or other known method. As previously described, the caller may elect from a number of options, such as to hold for a next available agent, select an automated response such as a fax back, or perhaps a later agent-initiated response such as an e-mail or call back. In all cases, CINOS seamlessly

processes and executed the logic required to accomplish the goal of the caller in a media and application-independent fashion.

(*Id.*, Col. 8, lines 44-61).

In other words, *Beck* teaches that the caller is first routed to an interactive voice response unit whereby the customer can be presented with varying choices, as is the case in *Nemoto*. In contrast, claim 1 of the present invention recites that the generated transcription includes only speech input from a first call taker to the first device. In other words, the caller interacts with a first call taker or human operator and a transcription is generated from the first call taker's voice input as recited in claim 1 of the current invention. *Beck* does not teach, or even suggest the desirability, of a first call taker's voice input to generate a transcription from an initial caller interaction. As a result, *Beck* does not teach or suggest the claim limitations recited in claim 1 of the Applicants' present invention.

Therefore, since neither *Nemoto* nor *Beck* teach or suggest that the speech recognition function transcribes only speech input from a first call taker as recited in amended independent claim 1 of the current invention, then the combination of the two prior art references cannot teach or suggest this claim limitation. Applicants have already demonstrated that amended independent claims 1 and 21 are in condition for allowance. Claims 16-20 and 34-38 are dependent claims depending on independent claims 1 and 21, respectively. Consequently, Applicants respectfully submit that claims 16-20 and 34-38 are also allowable, at least by virtue of their dependence on allowable claims.

Accordingly, Applicants respectfully request that the rejection of claims 16-20 and 34-38 under 35 U.S.C. § 103(a) as being unpatentable over *Nemoto* as applied to claims 1 and 21 above, in view of *Beck* be withdrawn.

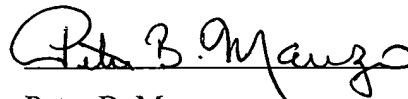
**IV. Conclusion**

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: March 21, 2005

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peter B. Manzo", written over a horizontal line.

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